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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,450	06/21/2001	Shi-Chang Wooh	MIT-117J	5772

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EXAMINER

HORTON, YVONNE MICHELE

ART UNIT	PAPER NUMBER
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3635

DATE MAILED: 07/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 09/886,450	Applicant(s) Wooh et al.
Examiner YVONNE M. HORTON	Art Unit 3635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on Apr 15, 2003

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-5, 7, and 9-18 is/are rejected.

7) Claim(s) 6, 8, 19, and 20 is/are objected to.

8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892)

4) Interview Summary (PTO-413) Paper No(s). _____

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s). 7

6) Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-3,14-16 stand and claims 5,9,10,12 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent #5,634,528 to WATTS et al. WATTS et al. discloses a building construction including a support structure (63, 63'), a support beam (84), at least one enclosure cell (80), and at least one tension member (83); wherein the tension member (83) suspends the enclosure (80) from the support beam (84), column 4, lines 26-31. In reference to claims 2 and 3, WATTS et al. discloses a support structure in the form of at least two columns (63, 63'). Regarding claim 5, the support beam (84) is a linear beam, see figure 2 and 4. In reference to claims 9 and 10, the support beam (84) also includes a number of tension members in the form of cable elements (83) that are used to suspend the enclosure cell (80). Regarding claim 12, the enclosure cell (80) includes a wall (W), see the marked attachment, and a floor, column 4, lines 47-51.

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In reference to claim 14, WATTS et al. discloses the method of using tension support members including the steps of providing a support structure (63, 63'); installing a support beam (84); providing at least one enclosure cell (80); and suspending the enclosure cell (80) with a tension member (83) from the support beam (84), column 4, lines 26-31. Regarding claim 15, WATTS et al. further discloses suspending several enclosures (80) from the support beam (84), see figures 2-5. In reference to claim 16, the support structure (63, 63') include at least two columns. Regarding claim 18, the support beam (84) is a linear beam, see figure 2 and 4.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #5,634,528 to WATTS et al. As detailed above, WATTS et al. discloses the basic claimed structure and method except for there explicitly being a number of linear support beams. Although WATTS et al. only appears to show one linear support beam (84), it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the structure with additional support beams, since the mere duplication of essential parts of an invention involves only routine skill in the art. For instance, if the weight of the enclosures being suspended was significant, one skilled in the art might use an additional support beam to aid in

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properly maintaining the enclosure upon the beam without causing any damage to the support beam itself.

5. Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #5,634,528 to WATTS et al. In view of US Patent #6,170,105 to DOYLE et al. As detailed above, WATTS et al. discloses the basic claimed structure except for the material of the support beam specifically including a fiber reinforced plastic material. WATTS et al. is silent with regards to the material of his support beams, but the figures appear to show some type of cementitious or flowable material. It is commonly or very well known in the art to reinforce cementitious or flowable type materials with plastic fibers. DOYLE et al. teaches that it is known in the art to form a building construction support beam member (10) that includes a mat of fiber reinforced plastic material (24), column 2, lines 40-67. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the structural member of WATTS et al. with a fiber reinforced plastic material, a taught by DOYLE et al., in order to contribute to the structural strength and integrity of the support beam itself. The use of fiber reinforced plastic for concrete structures provides excellent corrosion resistance as opposed to the use of steel reinforced concrete, and significantly reduces maintenance, reconstruction or replacement costs.

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Allowable Subject Matter

6. Claims 6,8,19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
7. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to teach the use of a building having suspended enclosures in combination with annular support beams.

Response to Arguments

8. Applicant's arguments filed 4/15/03 have been fully considered but they are not persuasive.

Unfortunately there was no Abstract associated with the file upon initial examination. However, the examiner thanks the applicant's representative for submitting the Office with a copy of the Abstract. Accordingly, the copy of the Abstract has been inserted into the application.

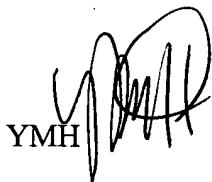
In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., cables not being "directly" connected to the beam) are not recited in the rejected claim(s). The claim merely calls for a functional statement in which the enclosures are "for" being suspended. There is nothing in the claim for "directly connecting" the cables to the beam. Although the claims are

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interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In regards to the applicant's argument that WATTS et al. does not teach an enclosure suspended from a support beam because the cables of WATTS et al. are allowed to move along the beam, the examiner concurs. However, although the cables of WATTS et al. allow horizontal movement, this does not forbid the cables from providing "suspension" of the enclosures. Furthermore, the claim does not specifically forbid movement of the cables. Again, the claim merely functionally required cables "for" suspension, and clearly, the cables of WATTS et al. are "for" suspending the enclosures.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvonne M. Horton whose telephone number is (703) 308-1909.



YMH

July 9, 2003

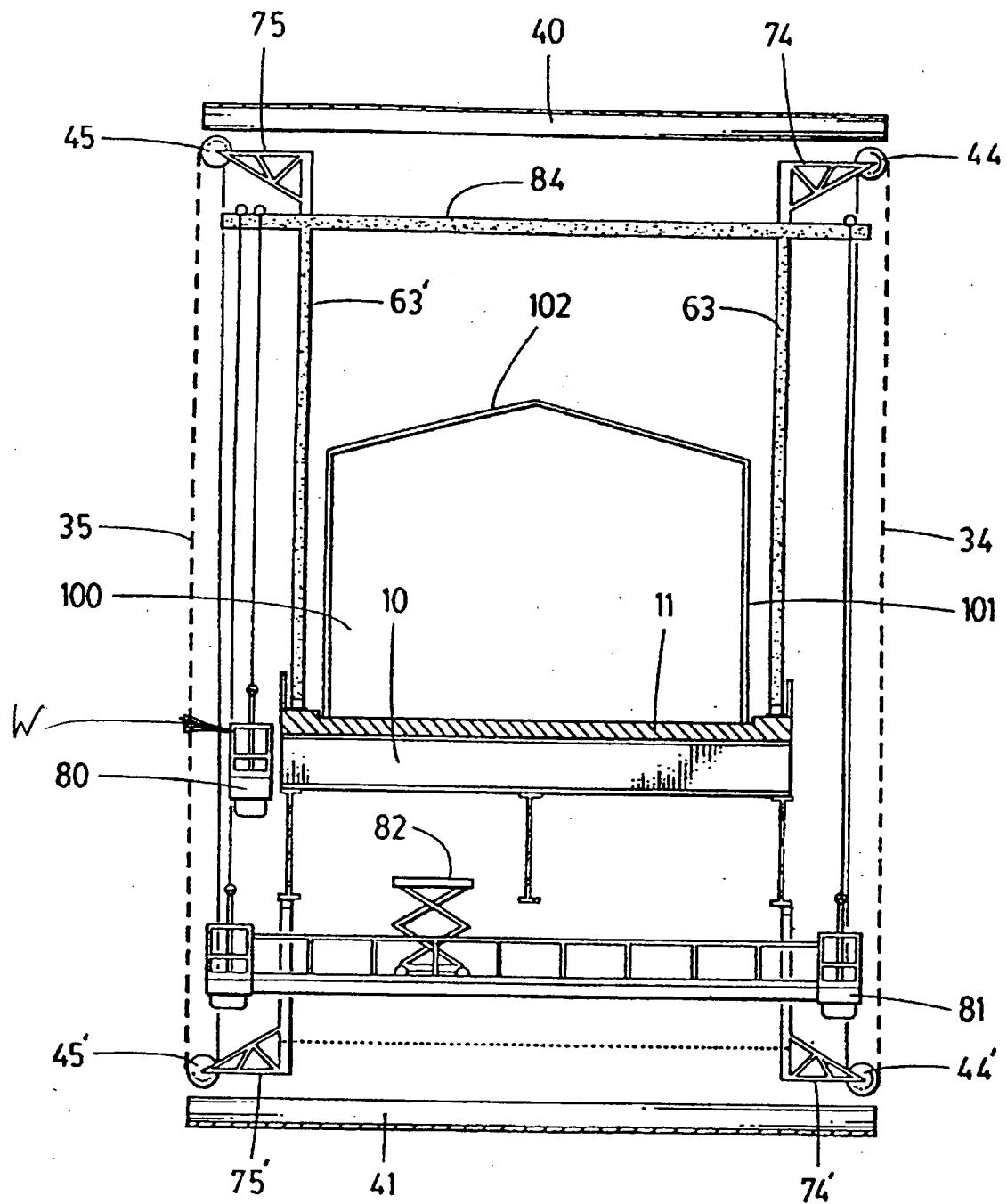


FIG. 4